

Executive Summary

Through the State of Tennessee Real Estate Asset Management (STREAM), the Tennessee Department of the Military has developed a program document dated December 23, 2022 of existing facility needs associated within the Tennessee Emergency Management Agency (TEMA) temporary Warehouse located near the Nashville Airport and the Regional Coordination Center (RCC) located on Foster Avenue in Nashville, Tennessee, to provided development data for the planned construction of new TEMA facility located on Stewart Lane in Nashville, Tennessee.

Project Background

TEMA operates a regional emergency coordination facility (RCC) in leased space off of Foster Avenue. This facility is currently too small to be effectively utilized for emergency response and serve as the State's back-up emergency operations center. TEMA manages the State's emergency supplies warehouse in leased space near the Nashville Airport. Centralizing these operations together will provide adequate space for RCC operations and storage, and increase productivity and allow for greater inventory control and oversight. TEMA's mission necessitates a large, centralized, State-owned facility providing greater preparedness opportunities in which the State can be prepared to efficiently respond to emerging emergencies.

Plan of Action

In order to support the operations conducted by TEMA across the State of Tennessee, a plan to develop and maintain a consolidated warehouse that can be ready for resource deployment within 24 hours of any given emergency and/or national supply shortages is required. Having a centralized supply cache would reduce the need for spontaneous purchases and would allow for TEMA to endure initial surge pricing to make the best use of available funds in a time of crisis.

The plan to consolidate warehouse space and RCC functionality into a single location provides an ability for TEMA to provide effective logistical coordination and distribution activities to assist the citizens of Tennessee before, during, and after a disaster. A large, centralized, State-owned facility provides greater preparedness opportunities in which the State can be forward leaning and reduce response time during future crises. This centralized facility will also allow for staff to be trained to specific sets of Standard Operating Procedures for space and equipment. This should provide greater accuracy for inventory and provide an increased culture of safety for staff involved in working in this site.

Project Components

The new facility will provide climate-controlled material, equipment and vehicle staging/storage, as well as dedicated spaces for offices, training, and meetings. There are four main components to the project:

Middle Region: This is a support component comprised of traditional office space including: Offices, Conference Rooms, Copy/Work Room, Breakroom/Kitchen, Restrooms, and Sleeping Quarters. Approximately 4,000 net square feet.

Middle Garage: Fleet Maintenance and Cage Storage spaces of approximately 2,000 net square feet.

Middle Region Coordination Center: Spaces include Regional Coordination Center/Emergency Operations Center, Offices, Conference Rooms, State Watch Point, Storage, Restrooms and Sleeping Quarters. Approximately 8,000 net square feet.

Warehouse: Open Warehouse, Cage Storage and Forklift/Equipment Storage of approximately 102,000 net square feet. Multiple docks are also anticipated.

Site: The proposed site is approximately 21-acre portion of the State of Tennessee property identified by parcel number 06900006600, a portion of the 110-acre tract located at 3881 Stewarts Lane, Nashville, TN and recorded in Deed Book 362, Page 636. See below.



Building Systems

No specific building systems have been identified at this time; however, we anticipate the following systems as design progresses. All these material concepts will be discussed with the selected CM/GC and coordinated.

Site: Parking will be provided for staff and Emergency Response personnel. Space will also accommodate semi tractor trailers for material/supply deliveries. Asphalt and concrete paving will be design to accommodate both vehicle and truck traffic. Site lighting will be provided to accommodate 24 hour operations.

A topographic and boundary survey is currently underway. A geotechnical report will be required to establish criteria for foundation design. Final geotechnical recommendations may modify the site preparation and/or the foundation system.

Architecture/Structure: The design team will explore a variety of systems that are appropriate for this building type and economical in this market including:

Interior Walls: A combination of metal stud with GWB and CMU block is anticipated for the interior walls.

Interior Finishes: Anticipated finishes include carpet, luxury vinyl tile (LVT), acoustical tile and GWB ceilings, acoustical treatments as needed for specialty areas (i.e., Regional Coordination Center/Emergency Operations Center, and State Watch Point).

Exterior Walls: Cast-in-place, site cast, tilt-up, and precast concrete are all up for. Premanufactured hollow core concrete slabs will be considered for the roof structure. The structure will also be evaluated for storm resiliency.

Roofing: TPO or EPDM, based on market, pricing, and State desires. Also Standing Seam metal roofing may be considered.

Mechanical: All spaces will be fully conditioned with heating, cooling, and ventilation. It may be provided by variable volume multizone packaged rooftop units (RTU) or ground mounted units (GMU). They will be provided with a DX cooling coil, electric heating coil, hot gas reheat coil for dehumidification, variable speed supply fans, variable speed compressors, and energy recovery. HVAC systems will be controlled by a direct digital control (DDC) system.

Electrical: Electrical systems include; power distribution, emergency power, lighting, lighting protection. Low Voltage systems include: structured cabling, communications, security, access control, and AV. An emergency power generation system including diesel or natural gas generator and automatic transfer switch shall be designed to support both the Life Safety Electrical System, Legally Required System, Stand-by Power Systems.

Other: The State Fire Marshal's Office will have plans review and certificate of occupancy jurisdiction for the building, but Metro Nashville Codes, Tennessee Department of Environment and Conservation (TDEC), among others will also be included for permitting. State of Tennessee High Performance Building Requirements (HPBr) will be followed. Checklists will be included and further defined throughout design and included in the final Project Manual. State of Tennessee BIM Requirements will be followed by the design and construction teams.